EXHIBIT 1

NAS Guardians' Reply in Support of Their Motion for Class Certification

KEY EXPERT DEPOSITION TESTIMONY

Plaintiffs' Expert Dr. Kanwalijeet Anand Testimony from January 28, 2020 Depo

Hope rises from these tragic ashes because "most of these problems can be ameliorated"if prevented or detected early." Anand Dep. 228:12-19.

Q: Do you have a sense as to what degree those other substances, if present, or if used by the mom, contribute to the symptomatology of a baby born with NAS?
A: They certainly do, although the symptomology of NAS is quite distinct from the withdrawal syndrome from some of those other drugs.… [NAS is] a constellation of neurological excitability, gastrointestinal disturbances and autonomic instability, and that entire constellation comprises NAS. Opiates … are depressant drugs. They reduce neuronal excitability. And where some of these other drugs, methamphetamine,… cocaine ..., these are all stimulant drugs, so the syndrome they produce from withdrawal is quite different. 189:16-190:15.

As to benzodiazepines: "You mentioned benzodiazepines. Now, benzodiazepine is also a depressant, similar to opiates, but the benzodiazepine withdrawal that is seen is quite different from opiate withdrawal.… [Y]ou have a flapping-like tremor. In opiate withdrawal, you have a fine tremor. In benzodiazepine withdrawal and opiate withdrawal, you both have insomnia, but in opiate withdrawal. You have hypertonicity, muscle tone is increased and the deep tendon reflexes are hyperreflexic, whereas in benzodiazepine withdrawal, it's the opposite. Muscle tone is decreased. They are actually the floppy infants. And their deep tendon reflexes are also suppressed. So there are ways of differentiating benzodiazepine withdrawal from opiate withdrawal even though both of these are sedatives. However, in benzo withdrawal, you don't get any gastrointestinal problems. There is none of the sucking, swallowing, dysphagia, retching, vomiting, diarrhea, abdominal cramping, all of those things just don't occur. So those are different syndromes clinically and that's why NAS, as it is described in the literature, it's important to establish that clinical diagnosis." 190:16-191:21.

"The babies that will manifest with NAS, if they're occurring in the setting of other substances being abused, will clearly show signs of NAS, and I'll tell you why. When you give these things together, when you give opiates, you give, say, oxycodone, and you give benzodiazepine or alcohol or methamphetamine or Ketamine or all these other drugs, they accelerate the rate at which tolerance occurs to the opiate.… Giving opiates does not increase the rate of tolerance to these other drugs, whereas these other drugs increase the rate of tolerance to opiates. And that's been shown in the lab in, you know, various other different experimental symptoms. **So that's why, if there is an exposure and you're seeing signs and symptoms of NAS, it is the opiate withdrawal that is the most prominent aspect. And you'll see all of the [NAS] constellation that I mentioned .... And it's fairly clear to any clinician to make that diagnosis."** 192:13-22, 193:8-19, 194:8-9.

"For example, a child with NAS, we wouldn't give, you know, cocaine or methamphetamine to. We would use opioids." 207:9-11.

Q: So if a baby is — meets any of these conditions, then that baby would be monitored; is that correct?
A: That is correct." 204:19-22.

Need for Injunctive Relief:

"What it will do is to provide for monitoring surveillance and support that is currently not being provided by the healthcare system or the education system or by the social services system. The kind of evaluations that we have included in our monitoring [and] surveillance protocol are not done routinely, and it will help diagnose conditions early so that we can address them at a time when they are pliable to being overcome ...." 221:8-18.

"There is currently a lack of an approach of how we are going to solve this problem. We have these children; and by the way, the opioid crisis is not over, it's still going on even today in 2020. There are thousands, tens of thousands, hundreds of thousands of houses of people being affected by it. And, so, somehow we have to solve this problem. And so this — for this class of individuals, this is one way of solving it." 221:24-222:9.

"I also propose in my declaration a scientific panel that reviews the data, that does these kinds of analyses, and changes the approach.… [E]fforts must be put in the direction to create the longitudinal data that will allow us to make the best decisions for these children and allow them to reach their fullest potential." 222:10-22.

Defendants' Expert Dr. Henry Lee Testimony from September 10, 2020 Depo

Class Definition/Ascertainability:

"It is — the Finnegan score or a modified version of that is the most common way that most hospitals and their practioners use to identify and diagnosis NAS." Lee Dep. 66:20-23.

"It wasn't the only way, but Finnegan or modified Finnegan score is a common tool that's used across the country." 67:18-20.

Q: You talk about infant NAS assessment, and what you found was: 96 percent of respondents reported using the Finnegan scoring tool, correct?
A: That's correct. 166:18-22.

Need for Monitoring/Science Panel:

"I think, just as these other researchers have done in the studies that … you have presented today and also in my report, **we can continue to study whether NAS or other associated factors may be related to outcomes that are beyond the newborn period**." 168:10-15.

Q: Wouldn't it make sense as a scientist to monitor these children to see how we can help them?
A: I think I'm agreeing — I would agree that we should be concerned about the health of all our children including those who are exposed to opioids. 109:12-20.

Q: Are you opposed to the appointment of a scientific panel to monitor health effects for children born with NAS?
A: I guess if somebody proposed that, I wouldn't oppose that. 111:8-14.

"I mean, I think; again, this is one part of my practice, to take care of babies with NAS, and, you know, they're — if there was more research in this area, I think certainly I wouldn't question the pursuit of such research." 112:4-8.

"So in that sense, I think — actually, not just children with — who have been diagnosed with NAS but all children, hopefully, in our society, which I think is something we can continue to work on, every child should have medical monitoring throughout their childhood, including those who have NAS diagnosed as a baby." 161:17-24.

Causation:

"If they had a prescription to opioids [during pregnancy] and the constellation of symptoms were consistent with what we know about NAS, we would call that NAS." 175:15-19.

"I think I generally agree with this sentiment that, first of all, that this association of prenatal opioid exposure is associated with — in some studies with motor delay." 129:20-23.

"I agree that opioid exposure during pregnancy can cause NAS in the baby." 158:12-14.

Defendants' Expert Dr. Lewis Rubin Testimony from March 10, 2020 Depo

Long-Term Adverse Effects:

"Reports of long-term adverse behavioral effects in children of narcotic-addicted mothers and in animal studies are disturbing." "In September of 1998, when this paper was published that is a reasonable statement." Rubin Dep. 145:11-20; Anand Decl., App. 2, Ex. P [Rubin Ex. 24].

"I would say that strictly speaking, I agree with the following sentence [by the March of Dimes] 'As they grow older, children who had NAS may have problems with speech, language and learning.' I agree with that[.]" 282:14-18; Bilek Decl., Ex. 1 [Rubin Ex. 27].[1]

"Perinatal Opioid Exposure Primes the Peripheral Immune System Toward Hyperreactivity" (Frontiers in Pediatrics) Anand Decl., App. 2, Ex. Q [Rubin Ex. 26]**:**

"I am listed as the editor…. I certainly looked at the article, looked at the reviews, and I was the editor." Q: And you approved the article for publication?
A: Yeah. That's the meaning of what I just said. 242:1-14.

Rubin reading: "'This evidence may, in part, contribute to the neurological injury following developmental opioid exposure characterized in our previous study. The current study and the treating investigations that link developmental and neurological injuries including cerebral palsy

[1] Q: Were you involved at all with the March of Dimes and their — in connection with NAS?
A: Yes, obviously. 279:5-8.

and Down syndrome with underlying systemic inflammation resulting from abnormal PBMC activity.'" Q: Do you agree with that?
A: Agree with what aspects of it?
Q: The conclusion of the study you edited?
A: Okay. The entirety of what I just read? Yeah. I agree with the results. 265:5-19.

Rubin reading: "'The devastating consequences of opioid exposure are the physical health and developmental outcomes of exposed children strengthen the need to advance scientific understanding of the underpinnings of opioid-induced neural injury and to advance biomarker development of this patient population.'" Q: That's contrary to your written report in this case, isn't it?
A: I don't know if it's contrary. It's certainly divergent[.][2] 259:8-17.

Q: Let's go to the second paragraph. It says: "Recent studies showing an association between opioid use during pregnancy and poor health outcomes for both pregnant women and infants highlight prenatal opioid exposure as a serious public health concern." Do you agree with that statement?
A: Sure. 251:10-20.

Rubin reading: "'The prenatal opioid exposures associated with an increased risk of fetal growth restriction, preterm birth, and lifelong motor and cognitive deficits.'" 252:14-17.

"So what I'm trying to say is that, yes, I'm the editor. Yes, my name is on here and yes, I agree with this paper." 254:14-16.

Why he omitted from his work in this case a study that he had just edited and approved:

"My report cites a small number of papers which in each case were meant to be illustrative of a given point. I will say for the nth time, my references are anything but comprehensive or all inclusive. No conclusion should be drawn further than that." 261:16-22.

Causation:

Q: [W]hen a woman is taking a prescribed opioid and she has a child that is born with NAS, that prescription would be a cause of the NAS in the child?
A: Yes. [T]he proximate cause of the NAS, perhaps you could say is that the prescription was written[.] 68:5-21.

Q: When opioids are prescribed [to the birth mother], my point is, that could be one of the causes of the NAS?
A: Certainly. NAS is neonatal abstinence. The abstinence has to come from being abstinence of something. 124:6-12.

[2] "Divergent," *adj.*, "tending to be different or develop in different directions."

Class Definition/Ascertainability:

Q: Now, in your diagnosing, do you use the Finnegan test?
A: I do, because it is by far the most common screening form that is utilized and has been utilized for several decades in the United States. 124:14-20.

Q: How do you make a diagnosis of NAS that is caused in part by opioids?
A: I make the diagnosis in that instance by having a baby who exhibits sign[s and] symptoms consistent with the profile, the behavioral repertoire of neonatal abstinence syndrome, and I draw the link to the possibility that maternal opioids are involved by having one or both of the following: A documented or suggestive maternal history. The second is a toxicology screening either on the mother or the newborn or both. 122:4-21.

Q: Have you ever diagnosed a NAS child and listed a possible cause of the NAS diagnosis as opioid[s]?
A: Yes.
Q: When have you done that?
A: Frequently.
Q: How do you make that diagnosis?
A: So there are definitions of all diagnoses. A definition that is very commonly accepted in medicine is the definition that appears in what are called the ICD, currently 10, codes, the criteria for making a diagnosis…. I adhere to those definitions. 121:8-122:1.

Dr. Anand Qulifications:

Q: Now, going back to Dr. Anand, you have relied on his expertise in the past, correct?
A: I certainly admire his expertise and find it useful in specific areas. 69:3-8.

Defendants' Expert Dr. Christina Porucznik Testimony from September 22, 2020 Depo

"As an epidemiologist, I do not diagnose anything, including neonatal abstinence syndrome." Porucznik Dep. at 56:23-25. "As an epidemiologist, I would not get in between a doctor diagnosing a patient with NAS" (57:10-11); never published any literature on the use of opioids in newborns or pregnant women or "clinical outcomes related from prenatal or postnatal exposure to opioids" (57:19-20); "I have not published on the mechanisms associated with opioid analgesia tolerance or withdrawal." (57:25-58:2); "I have not published in the peer-reviewed literature about fetal brain development related to exposure to anything, including opioid drugs, other drugs of use or any other substance." (58:7-10); "I have not published anything about neuro-development following exposure to substances in-utero." (58:15-17).

Causation:

"[I]f your baby never had an opioid exposure, then they couldn't have neonatal opioid withdrawal syndrome." 143:5-7.

Q: Your expertise is not the study of NAS, right?
A: That is correct. 101:25-102:2. "If something that came across looked interesting I might read it, but I'm not systemically [sic] searching for studies about NAS." 102:7-10. "As an

epidemiologist, I'm really interested in about appropriate timing of exposure assessment, and how we're measuring exposures in populations." 102:20-23. "I've never done my own research or published about NAS, that is correct." 103:3-4.

Reviews additional studies the day before depo:

"Do you mean the papers that they gave me yesterday and suggested that I look at because you like them?" 100:19-21

Re Erratum:

"The conclusion from [the Baldacchino] study, which is party of what informed my report, was that there was no significant impairment compared to nonexposed children." 90:17-20. "That study was part of what my report relied upon." 90:23-25; Anand Decl., App. 2, Ex. B [Porucznik Ex. 56].

Erratum: "It means that this is like the worst day of their scientific lives and they made a mistake, and they are publically [sic] acknowledging it." 95:18-21.

"[D]uring our entry of raw data … we transposed one of the columns of data.... This meant the values generated by all the meta-analysis and results produced in the published manuscript ... were incorrect.... The new conclusions of the paper show significant impairments, at a significant level … for cognitive, psychomotor, and observed behavioral outcomes for chronic intrauterine opioid exposed infants and/or preschool children compared to nonopioid exposed infants and children." 95:23-96:12; Anand Decl., App. 2, Ex. B [Porucznik Ex. 56].

"I did not know about his erratum[3] before today" (98:1-2); "I did not ... go searching to see if this author had published anything else that might contradict what they had previously published" (98:12-14). Q: If I were your peer review right now on your report …. I'd point this out to you, and you'd have to fix this, wouldn't you?
A: That's how science works. 99:12-16.

Baldacchino meta-analysis concludes "longitudinal studies are needed to determine if any neuropsychological impairments appear after the age of five years and to help investigate furth role of environmental risk factors on the effect of core phenotypes." 93:25-94:4; Anand Decl., App. 2, Ex. A [Porucznik Ex. 55].

Q: Now, the fact that they've changed their conclusion, you're now going to rely on the fact that the evidence is sparse?
A: I've stated in my report that the evidence was sparse already. 100:10-15; Anand Decl., App. 2, Ex. B [Porucznik Ex. 56].

Role of Prescription:

Q: [O]ne of these things to do that you would agree to try to evaluate opioid exposure to the fetus is to look at the prescription history of the birth mother, right?

A: [L]ooking at the prescription history of the birth mother is one possible way to try to assess exposure to opioids that came through medical interaction[.] 132:13-20.

"I think pharmaceutical companies do a lot of marketing. And yet, as controlled substances, access to opioids is still something that happens in a doctor-patient relationship." 76:6-9.

Class Definition/Ascertainability:

Q: The plaintiffs' experts have determined there are approximately 500,000 NAS births in the last 18 years. Do you have any disagreement with those numbers?
A: So neonatal abstinence syndrome is a diagnosis. And in order for that diagnosis to have been made, there needed to be some clinical suspicion, and then proceeding through the steps of applying a case definition. 66:14-23.

Science Panel and Medical Monitoring:

Q: Do you think it should be studied more or less?
A: I am sure that it is being studied. As long as it's a research question, then, sure, people are going to study it. 88:4-9. As to how they study it: "I think it's really important to come back to the fundamentals about measurement of exposures, and measurement of outcomes, and consideration of potential confounders." 87:25-88:3.

Re medical monitoring of children that were born with NAS: Q: Is that something that you think is appropriate or inappropriate?"
A: Well, I think that the growth and development of all children is a good idea to pay attention to." "Children born with NAS are part of 'all children', yes." 88:17-89:1.

"I think the notion of a scientific advisory board or a science panel could be a reasonable one." 89:9-10.

"'Managing pain in pregnant women is uniquely challenging because clinical decision-making must account for the pregnant mother and the developing fetus.'" 138:2-23. "I think anyone would agree with that statement. So yes, I agree with that statement." 139:2-3. "'Greater research into chronic pain management is needed.'" Agree? "It seems like a reasonable statement to say that researching chronic pain management in pregnancy is a good idea." 139:11-16.

"I think if we are interested in outcomes that may manifest in older ages than infant and preschool, then there need to be well-designed studies with precise exposure assessment and outcome assessment and ability to control for confounders to try and answer that research question." 94:25-95:5.

Q: [D]o you think there's a potential to assess children with — that were born with NAS, to assess them [in] such a manner in which they're not to be stigmatized?
A: You're not going to believe this, but I can actually agree with you.… Here's the thing, I think that a thoughtfully developed program, which from the getgo has intention and plans in place to be continually weighing risks and benefits to participants may have the ability to avoid stigma and labeling." 149:13-25.

Porucznik and CDC:

"In 2016 I was the Chairman of the Working Group through the Board of Scientific Counselors for the CDC on reviewing the CDC's proposed opioid prescribing guidelines for chronic pain in primary care." 12:25-13:3.

"Your best service is possible only when you are not affected by conflicts of interest or appearances of conflicts of interest." 23:3-8.

"I still serve on the Board of Scientific Counselors for the National Center for Injury Prevention and Control" and "that group serves as an external advisory board for that center at CDC" 13:5-10.

"One of the big things that the injury center has been doing in recent years has been related to harms related to opioid drugs. They have had the guidelines"; "They promulgated guidelines that was [sic] based on a synthesis of the evidence at that time and input from the various scientific stakeholders. And subsequent to that, they have issued many statements to help clarify what is in the guidelines, and then scientific reports based on analyses of public health data." (14:3-8).

CDC Guidelines:

"The target population for the guidelines was managing chronic pain in primary care, not specifically pregnant women." 140:17-19.

"The primary audience for the guidelines is primary care management, and pregnant women constitute a special population who are not part of the target audience for the — from those guidelines." 25:9-12. "The focused population for the guidelines does not include pregnant women." 26:2-3. Q: So you didn't even look at the NAS issue in connection with the guidelines?
A: None of the guideline statements are about management of pregnant women. The audience for the guidelines is for managing chronic pain in primary care. 65:2-10.

"As we were reviewing the evidence considered as a part of the workgroup for chronic pain prescribing in primary care, turns out that pregnant women are another group that are frequently not included. They're excluded from research studies which means that that — they were not necessarily a part of the studies that we were reviewing. They're considered a special population. So a child born with NAS is not part of the population intended to be addressed by the guidelines." 66:2-13.

"[CDC] guidelines are intended to help be a decision framework to be applied within a doctor-patient relationship." 82:25-83:1.

"I do not believe any of the guidelines call out separate recommendations based on patient sex." 83:23-25; re whether any investigations on differing effect on women: "So our charge was to evaluate the evidence related to the guideline statements. And as none of the guideline statements were differential by patient sex, I do not recall such discussions." 84:8-11.

Failure to Review Contrary Studies on Long-Term Effects from NAS:

Porucznik did not look at Yeoh until the day before the depo. 104:13-15.

Porucznik re Yeoh: "I think that this study has a place in the literature. And that as people are evaluating, you know, what can we see? You know, each study can contribute something, and it's accorded more or less weight in factors related to the quality and design and conduct in the study.… So I'm not saying that this should just be tossed out entirely. I'm saying that, as with any study, even a meta-analysis that we need to, you know, look carefully at the exposure assessment and the outcome assessment to think about how much weight to give it into our analysis." 110:12-23.

Porucznik re Yeoh study: Q: Would you agree that epidemiologists in your field would rely on a study such as this?
A: A study like this would fall into the full group of evidence that would be used to synthesize and draw a conclusion." 110:24-111:13.

Defendants' Expert Dr. Tricia Wright Testimony from September 17, 2020 Depo

Causation:

"One of the risks of taking opioids during pregnancy is having a baby with NAS[.]" Wright Dep. 88:25-89:2.

Q: Why do you explain the risks of having NAS to women that are being prescribed opioid prescriptions?
A: NAS is a risk of a woman taking opioids during pregnancy. You know, approximately 50 to 60 percent of babies will have some degree of NAS. 36:3-10.

"There are many factors that have led to the overprescription of opioids, doctors being educated by the American Pain Society [and] scores that give hospitals higher ranking and doctors higher ranking if they give pain medication." 23:10-15.

"One of problems with the overprescription of opioids is the insurance coverage. Insurance coverage will cover opioids, but they won't cover physical therapy. They won't cover massage. They won't cover a lot of things that are better treatment for pain. And it is much easier to get an opioid prescription that it is any of these other treatments that work better." 24:8-15.

"Again, I don't – I don't start women on opioids for chronic pain. I continue them on it when its been started before." 93:5-7.

"Opioid Therapy for Chronic Pain: Overview of the 2017 US Department of Veterans Affairs and US Department of Defense Clinical Practice Guideline" (Pain Med) Anand Decl., App. 2, Ex. L **[**Wright Ex. 9]:

"It is something that I would definitely look at." 95:4-5.

"I would not agree that the users are responsible entirely for … [opioid] epidemic. And I would not agree that the physicians are responsible entirely for the epidemic." 49:23-50:1.

"People who use drugs are — they are victims, not causes." 50:22-23.

"There are issues with diversion in many, many areas. So, yes, that can be a large problem if opioids are — if there's an excess of opioids prescribed, that they can be given or sold to others without a prescription." 54:25-55:4.

Regarding the role of manufacturers and efforts to justify prescribing medications "before pain was probably undertreated, so now we've gone to overtreating pain, and so — or not treating pain appropriately[.]" 57:7-10.

Outlawing payments and gifts to physicians by drug manufacturers: "My understanding is that any time there could be a conflict of interest, and that when — even something as small as a pen can influence prescribing behavior." 58:13-16.

Role of Prescription:

"There was one study that showed that 20 percent of Medicaid women did receive an opioid prescription." 77:8-10.

"You are asking me if the increase in the amount of opioids used is because of the increase in prescriptions ...." 25:2-4. "I would say that definitely, there was an increase in prescriptions written, which therefore would increase the amount of opioids being used; that is a correct statement. Whether that increase is directly responsible for the entirety of this epidemic, … there is many other factors leading to this besides just prescriptions." 25:10-17. "Increased prescriptions will definitely increase the amount of opioids around, definitely. And there is — you know, nobody is arguing that there was an increase in prescriptions written. There are many reasons for that, and looking in hindsight, we can say that was probably not the wisest thing." 25:22-26:3.

Other drugs that cause NAS are all additive:

"Gabapentin can worsen the effects of NAS,... Duloxetine ... also can worsen NAS symptoms." 92:17-19.

Opioids Affect Women Different from Men:

Women are prescribed opioids more often and women also have less tolerance for opioids. 26:18-21.

Women "have a telescoping effect, so that any substance that is used by women and misused has a greater propensity to cause a use disorder." 27:13-16.

Relies on CDC guidelines for treatment of acute pain. 33:5-8. "I don't start anybody on opioids for chronic pain." 33:24-25.

"The chronic pain [cases] that I treat are the ones that I inherit when they become pregnant." 33:22-23.

Need for Further Studies:

"A lot of [pharmaceutical] studies haven't been done on women because of the rick of that they may become pregnant. So we don't know a lot of the differential effects of a lot of medications in women and in women during pregnancy, because they haven't been studied before in that particular case." 28:8-13.

Misundertanding of Class:

"My understanding of what I was offering is the understanding of the class suit, and saying that all women that use opioids area a single class." Q: That's your understanding of what the suit is? A: That's my understanding of what the suit is. 118:5-13.

Literature Review (or Lack of):

"You know, human studies are extremely difficult. So it's hard to draw conclusions from one human study; that why we look at the preponderance of data over many, many studies." 66:24-67:2.

Reliance on Errata study: "The studies that I've looked at that have controlled for as many factors as I can and actually have a good analysis have shown no long-term effects. Some of the studies that have shown long-term effects are earlier studies and poorly designed studies.… The preponderance of the evidence shows that there are no long-term effects from opioid exposure." 68:2-9.

Meta-analysis by Yeoh: "[N]ot one of the ones I've reviewed lately.... I might have seen it last year." 73:12-14. "This is something I would take into consideration." 73:18-19. "I have not looked at this particular article other than just glancing through it." 74:22-23.

Relies on three studies: Ecker, Merhard and Baldacchino [Errata study] (69:25); "it's a synthesis of all the different literature out there" (70:21-22).

Re Opioid Maintenance:

"That is one thing, that sometimes is lifelong treatment, and sometimes women need just temporary treatment. What I usually counsel women is to stay on their opioid replacement for at least a year postpartum. And sometimes it is lifelong, and women do much better." 129:5-10.

<u>Defendants' Expert Dr. Pradeep Chintagunta Testimony from March 9, 2020 Depo</u>

Marketing of Opioids:

Q: So it is fair to state that you have no opinions on the appropriateness of the marketing activities of the opioid defendants in causing the opioid crisis?
A: That would be fair. Chintagunta Dep. 19:14-18.

"Drivers of the opioid crisis: An appraisal of financial conflicts of interest in clinical practice guideline panels at the peak of opioid prescribing" (PLOS ONE) Bilek Decl. Ex. 2 [Chintagunta Ex. 2]:

Agrees that "guidelines for prescribing" are "common for all physicians" (48:20-23); "I'm assuming that if a physician prescribed a medication, they knew the guidelines under which one had to prescribe the medication" (50:2-9).

Re guideline bias: "Cricitical practice guidelines is another mechanism that the pharmaceutical industry may have used to influence physicians' opioid-prescribing practice." 56:9-14.

Conclusion: "The findings reveal that the guidelines for opioid prescribing [of] chronic non-cancer pain from 2007-2013 were at risk of bias because of pervasive conflicts of interest with the pharmaceutical industry and the positive mechanisms to address bias." 50:16-21.

Re Omissions:

Q: Well, I'm asking you that in marketing, the issue is drug manufacturers have the obligation in marketing to not omit to tell important material information to the doctors, correct?
A: Yeah, in general, if you're saying if there's important information, I would say, yeah, yes." 35:19-36:3.
Q: And what's important is for that information that's being conveyed to physicians to be truthful, correct?
A: Sure.
Q: Not to omit material information to the doctors, right?
A: Sure." 45:7-13.

Did not look at payments to doctors: Q: [Y]ou didn't even look at the issue of payments to physicians with regard to what was — whether that was increasing the number of neo abstinent [sic] children being born?
A: Yeah, that was not my remit. 46:18-24.

Q: You're seeing a lot of associations, though, with the opioid crisis in [sic and] the marketing, correct?
A: You have shown me three articles that show an association, sure. 58:8-12.

Q: I'm struggling to find anywhere where you've got data for your opinions.
A: I was not asked to look at data. 88:4-8.